QUALITY ASSURANCE/QUALITY CONTROL REPORT

EE/YELAHANKA/QA/PR/22/2022-23, Date : 2/12/22

Name of Work	:	Upgradation of Energy efficient Illumination and ornamental poles in Ward No 02 & 04 Parks in Yelahanka Assembly Constituency. Estimated cost – 150.00 Lakhs
Bill No	:	1st and Final (RA Bill)
Job Code	:	002-21-000041
Type of Test Performed	:	As per IS13311-2-1992 (Rebound Hammer Test)
Materials on which Tests Was Performed	:	1. RCC Platform for Electric pole (M20) (RHT)
Officers present during inspection	:	1. Sri. Rajendra. Naik. EE– Electrical Yelahanka 2. Sri C.Shridhar. AEE-Quality Assurance
PMC Details	:	**M/s NEWZEN CONSULTANT BANGALORE**
Observations	:	Rebound hammer test was conducted in presence of EE(Electrical Yelahank) & Project Management Consultants representative. The Rebound Hammer Test was conducted randomly on RCC Platform for Electric pole. The readings of Rebound Hammer Test are tabulated and analysis of test results done by PMC is here by furnished. The location wise test results are reproduced in the tables shown below.
Test Locations:		**Location 1:** Doddaballapura main road,, Yelahanaka, Bangalore. (Electric pole No 52,55, 57) RHT

002-21-000041

ಸಹಾಯಕ ಕಾರ್ಯಪಾಲಕ ಅಭಿಯಂತರರು
ಗುಣಭರವಸೆ/ಗುಣನಿಯಂತ್ರಣ ಉಪ-ವಿಭಾಗ ಯಲಹಂಕ
ಬೃಹತ್ ಬೆಂಗಳೂರು ಮಹಾನಗರ ಪಾಲಿಕೆ

02/12/22

ಕಾರ್ಯಪಾಲಕ ಅಭಿಯಂತರರು
ಗುಣಭರವಸೆ/ಗುಣನಿಯಂತ್ರಣ ವಿಭಾಗ
ಬೃಹತ್ ಬೆಂಗಳೂರು ಮಹಾನಗರ ಪಾಲಿಕೆ

02/12/2022

Table-01: Rebound Hammer Test Results for Location-1

Sl. No.	Floor level / Structural Member /Identification	Position/Elevation (cm)	Rebound Hammer Number	Average reading	Compressive Strength (N/mm2) for 28 days	Impact Direction
Sample Tested Location at Near Doddaballapura main road,, Yelahanaka, Bangalore.						
RCC Platform for Electric pole.						
1	**Pole no - 52**	Location-1	27	26.67	24.00	Horizontal
2			28			Horizontal
3			26			Horizontal
4			24			Horizontal
5			30			Horizontal
6			25			Horizontal

Table-02: Rebound Hammer Test Results for Location-1

Sl. No.	Floor level / Structural Member /Identification	Position/Elevation (cm)	Rebound Hammer Number	Average reading	Compressive Strength (N/mm2) for 28 days	Impact Direction
Sample Tested Location at Near Doddaballapura main road,, Yelahanaka, Bangalore..						
RCC Platform for Electric pole.						
1	**Pole no - 55**	Location-1	23	24.67	22.00	Horizontal
2			25			Horizontal
3			24			Horizontal
4			24			Horizontal
5			28			Horizontal
6			24			Horizontal

02/12/2022
ಮುಖ್ಯ ಅಭಿಯಂತರರು
ಗುಣಭರವಸೆ/ಗುಣನಿಯಂತ್ರಣ
ಬೃಹತ್ ಬೆಂಗಳೂರು ಮಹಾನಗರ ಪಾಲಿಕೆ

02/12/22
ಕಾರ್ಯಪಾಲಕ ಅಭಿಯಂತರರು
ಗುಣಭರವಸೆ/ಗುಣನಿಯಂತ್ರಣ ವಿಭಾಗ
ಬೃಹತ್ ಬೆಂಗಳೂರು ಮಹಾನಗರ ಪಾಲಿಕೆ

Table-03: Rebound Hammer Test Results for Location-1

Sl. No.	Floor level / Structural Member /Identification	Position/Elevation (cm)	Rebound Hammer Number	Average reading	Compressive Strength (N/mm2) for 28 days	Impact Direction
Sample Tested Location at Near Doddaballapura main road,, Yelahanaka, Bangalore.						
RCC Platform for Electric pole.						
1	**Pole no - 57**	Location-1	30	26.50	24.00	Horizontal
2			24			Horizontal
3			29			Horizontal
4			27			Horizontal
5			23			Horizontal
6			26			Horizontal

Conclusion:

The file of above work was submitted to QA department on 18-11-2022. QA/QC division have visited workspot and it was observed items in bill have been completed from visual inspection/observation. The strength of concrete used for RCC Platform for Electric pole work has been assessed by conducting Non Destructive Test (Rebound Hammer Test) in presence of PMC and engineer in charge of work.

The test results furnished by PMC consultants for the items tested at above locations are reproduce here with for further needful action.

The Result furnished relates only for Item tested in the particular location randomly.

The Engineer in-charge of work shall ensure that frequency & number of tests are conducted and are obtained as per relevant codes. Further Engineer in charge of work shall ensure that results obtained are found to be satisfactory.

The concerned Engineer in charge of the work shall ensure that the materials used shall be in accordance with standard specifications / BIS / and relevant IRC codes and follow the direction issued by Chief Commissioner letter number **dated 01.08.2022 & 14.09.2022** and take necessary action as appropriate in accordance with the law.

02/12/2022
ಮುಖ್ಯ ಅಭಿಯಂತರರು
ಗುಣಮಟ್ಟ ಸೇವೆ/ಗುಣನಿಯಂತ್ರಣ
ಬೃಹತ್ ಬೆಂಗಳೂರು ಮಹಾನಗರ ಪಾಲಿಕೆ

2/12/22
ಕಾರ್ಯಪಾಲಕ ಅಭಿಯಂತರರು
ಗುಣಮಟ್ಟ ಸೇವೆ/ಗುಣನಿಯಂತ್ರಣ ವಿಭಾಗ
ಬೃಹತ್ ಬೆಂಗಳೂರು ಮಹಾನಗರ ಪಾಲಿಕೆ

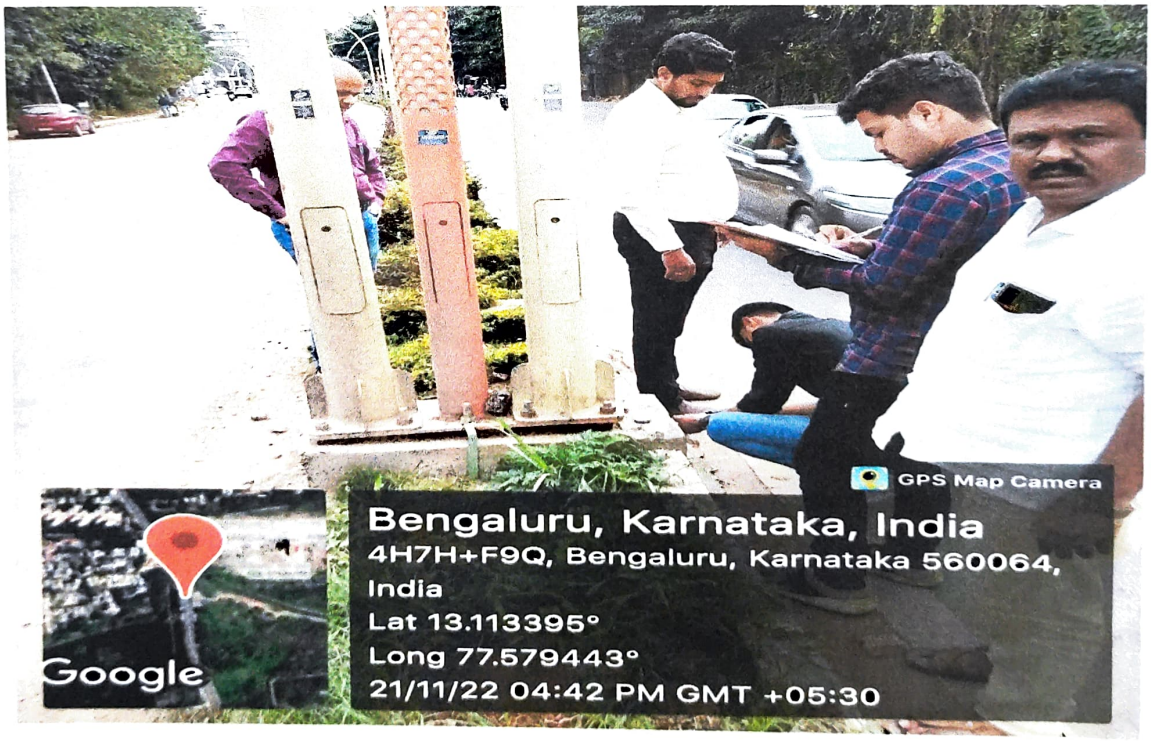
2/12/22
ಕಾರ್ಯಪಾಲಕ ಅಭಿಯಂತರರು
ಗುಣಮಟ್ಟ ಸೇವೆ-ವಿಭಾಗ ಯಲಹಂಕ
ಬೃಹತ್ ಬೆಂಗಳೂರು ಮಹಾನಗರ ಪಾಲಿಕೆ

Location 1: Doddaballapura main road,, Yelahanaka, Bangalore. (Electric pole No 52,55, 57) RHT

ಸಹಾಯಕ ಕಾರ್ಯಪಾಲಕ ಅಭಿಯಂತರರು
ಗುಣಭರವಸೆ/ಗುಣನಿಯಂತ್ರಣ ವಿಭಾಗ
ಬೃಹತ್ ಬೆಂಗಳೂರು ಮಹಾನಗರ ಪಾಲಿಕೆ

ಕಾರ್ಯಪಾಲಕ ಅಭಿಯಂತರರು
ಗುಣಭರವಸೆ/ಗುಣನಿಯಂತ್ರಣ ವಿಭಾಗ
ಬೃಹತ್ ಬೆಂಗಳೂರು ಮಹಾನಗರ ಪಾಲಿಕೆ

Location 1: Doddaballapura main road,, Yelahanaka, Bangalore. (Electric pole No 52,55, 57) RHT



ಸಹಾಯಕ ಕಾರ್ಯಪಾಲಕ ಅಭಿಯಂತರರು
ಗುಣಭರವಸೆ/ಗುಣನಿಯಂತ್ರಣ ಉಪ-ವಿಭಾಗ ಯಲಹಂಕ
ಬೃಹತ್ ಬೆಂಗಳೂರು ಮಹಾನಗರ ಪಾಲಿಕೆ

ಕಾರ್ಯಪಾಲಕ ಅಭಿಯಂತರರು
ಗುಣಭರವಸೆ/ಗುಣನಿಯಂತ್ರಣ ವಿಭಾಗ
ಬೃಹತ್ ಬೆಂಗಳೂರು ಮಹಾನಗರ ಪಾಲಿಕೆ

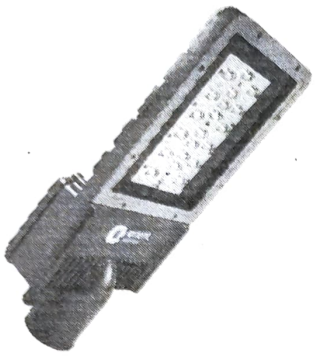
ಮುಖ್ಯ ಅಭಿಯಂತರರು
ಗುಣಭರವಸೆ/ಗುಣನಿಯಂತ್ರಣ
ಬೃಹತ್ ಬೆಂಗಳೂರು ಮಹಾನಗರ ಪಾಲಿಕೆ

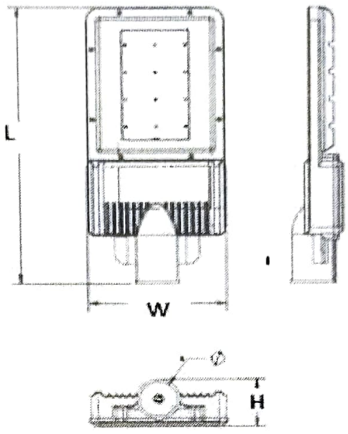
CK BIRLA GROUP

orient electric

switch to smart

TECHNICAL DATA SHEET **FIESTA PLUS 120**





L - 446 mm
W - 205 mm
H - 85 mm

Mounting : Pole mounted with 60 mm Pole OD

Highly efficient IP66 LED streetlight with aluminium pressure die cast housing toughened glass in the front and peanut lens for batwing light distribution to ensure uniform light distribution ,higher spacing between poles and maintenance free system.

Technical Specification:

Main Housing :	Excellent thermally managed Pressure die cast aluminum
Front Cover:	Clear Toughned Glass
LED:	LM80 certified high power LED.
Lens:	Batwing 135/85 Degree
Gear:	Integral, Electronic, constant current driver.
Internal Wiring:	Industrial grade cooper wire
Hardware:	SS or Ms zinc plated & passivated.
Ingress protection:	IP 66
Lumen maintenance:	50,000 Hrs @ L70
Operating temperature:	0°C to 50°C
Rated voltage & frequency:	240V, 50Hz AC

 # Energy saving
 # Long life
 # Easy installation & maintenance

Cat. Ref.	Wattage	Current	Pf	Ithd	System Efficacy	CCT	CRI
LSFS-120-C	120 ± 5%	≤0.552	≥0.95	≤10%	≥100	5700	≥70

Protections: Open & Short circuit protection, reverse polarity protection and surge protection

Applicable Standard: IS 10322(Pt.5/Sec.3)1987 / IEC 60598

Applications:
Road lighting / Campus lighting / Industrial estates / Open parking

TDS No.	PLSL0419-010	Drawn By	AC
Revision	-	Approved By	RP
V-code	KI	Valid Upto	31-Mar-20

Orient Electric :
C-130 Sector 63
Noida I 201301

Pictures are for illustration purpose only, actual product may vary

PLANET ELECTRO LABS

WZ-407/B-1, Basai Dara Pur,
Near Ramesh Nagar Metro Station,
New Delhi-110015 (India)

Mob.: 91 9821974769|011-25106978
E-mail : planetelectrolabs@gmail.com
Website : www.planetelectrolabs.com

TEST CERTIFICATE

Report No.: PEL/ED/18700618A	IES LM79-08	Page 1 of 12
Dated: 12/07/2018		

TEST REPORT
IES LM 79-08
Electrical and Photometric Measurements of Solid State Lighting

Test Report No.	PEL/ED/18700618A
Date of Issue	12/07/2018
No. of Pages	12
Testing Laboratory Name **Address**	PLANET ELECTRO LABS WZ-407/B-1, First Floor, Basai Darapur, Near Ramesh Nagar Metro Station, New Delhi-110015 (INDIA)
Manufacturer's Name **Address**	M/S ORIENT ELECTRIC LTD. C-130, Sector-63, Noida (U.P) 201301, India
TRF No.:	PEL/ED/18700618A
TRF Originator:	PLANET ELECTRO LABS
Test Item Description	LED FIXTURE
Trade Mark	orient electric
Applicant	M/S ORIENT ELECTRIC LTD.
Model(if applicable)	NIL
Rating	Input Voltage: 220-240VAC, 50 Hz, Wattage: 100W, 5700K, PF>0.9

PART B - SUPPLEMENTARY INFORMATION

1. Deviations from the test methods as per relevant specification/ work instructions, if any: **NIL**
2. Details of the drawings, graphs, tables, sketches or photographs as referred in the test report, if any: **NIL**

Notes:

1. This report is not to be reproduced wholly or in part without our special permission in writing.
2. This report refers only to the particular sample detailed above and solely for Quality purpose.
3. The results reported in this certificate are valid at the time of and under the stipulated conditions of measurement.
4. Sample will be disposed off after 30 days of issue of test report if no any further information is received.
5. Any recognition claim in the test report is solely for promotional/advertising purpose and has no relation with the content of the report.
6. All test are certified except one with astrik.

Tested By	Approved by	Issued By
Testing Engineer	Dy. Technical Manager	Proprietor
Date: 12/07/2018	Date: 12/07/2018	Date: 12/07/2018

Terms & Conditions: 1. This report will not be valid for judicial purpose. 2. Total liability of our laboratory is limited to invoiced amount. 3. Test reports are valid only for the sample tested in our laboratory. 4. Samples tested are Non-Returnable until specified at time of sample submission.

NC/QC/PYNK/2021-22/PMC

Date: 29-08-2022

To,
The Executive Engineer,
Yelahanka Project Division,
Bangalore.

"FREQUENCY AND QUALITY REPORT"

Dear Sir,

Subject: Regarding Quality Report for the below mentioned work.

Name of Work: Upgradation of Energy efficient Illumination and ornamental poles in Ward No 02 & 04 Parks in Yelahanka Assembly Constituency

Item No	Description of work	Unit	Qty	No of Samples Tested	Frequency	Results Standards
1	Providing and laying in position plain cement concrete of nominal mix 1:4:8 using 40 mm and down size graded granite	Cum	8.38	1	Per 100 cum	Meets Morth V Revision Standards
2	Providing T.M.T steel reinforcement for R.C.C work including straightening,cutting ,bending ,hooking,placing in	Kgs	4689.26	2	Per Dia	Meets Morth V Revision Standards
3	Providing and laying in position reinforced cement concrete of Design Mix M20 with OPC @ 320kgs, with 20mm and down size	Cum	91.42	2	Per 50 cum	Meets Morth V Revision Standards

With respect to the above subject & name of the work, we have inspected the work and the Quantity and Quality of above mentioned items of the work was found to be completed satisfactorily for the 1st and Part bill. The all the samples satisfies the standards requirements as per MORTH V Revision 2013.

Thanking you,

With Regards,

For Newzen Consultants Bangalore

NC/QC/YED/2022-23/W24-C1 **Date: 24-05-2022**

1. TEST REPORT ON CEMENT:

Sub: Testing of 53 Grade Cement Sample (IS 12269-1987).
{Project*: Upgradation of Energy efficient Illumination and ornamental poles in Ward No 02 & 04 Parks in Yelahanka Assembly Constituency.}
Ref.: Material testing/PMC/22-23,
Report Required for: Assistant Executive Engineer,
Yelahanka Electric Division,
BBMP, Bangalore.
Name of the Agency/Contractor*: Sri. MADHUSUDAN A N (SURAKSHA ELECTRICALS).

PHYSICAL TESTS ON CEMENT

Grade * : 53,
Type * : O.P.C

TABLE 1.1:

SL No	Name of Test	Test Results	Requirements as per IS 8112-1989
1	Initial setting time	**162 min**	Shall not be less than 30 min
2	Final setting time	**275min**	Shall not be more than 600 min
3	Fineness (by dry sieving on IS 90 micron sieve)	**2.19%**	Not to exceed 10.0%
4	Soundness test(by Le-Chatelier's method)	**2.06mm**	Shall not be more than 10 mm
5	Compressive strength a) 3 days (average of three results)	**28.65 N/Sq mm**	Shall not be less than 27 N/Sqmm

The result of the materials tested meets the standards and hence can be used for the work.
Doddaballapur Road From New Udupi Veg Hotel To Susilamma Layout

Page No. 1/1,

NC/QC/YED/2022-23/W24-PCC1 **Date: 24-05-2022**

1. TESTING OF COARSE AND FINE AGGREGATES:

Sub: Testing of Coarse and Fine aggregates to be used for bed concrete.
{Project*: Upgradation of Energy efficient Illumination and ornamental poles in Ward No 02 & 04 Parks in Yelahanka Assembly Constituency.}
Ref.: Material testing/PMC/22-23,
Report Required for: Assistant Executive Engineer,
Yelahanka Electric Division,
BBMP, Bangalore.
Name of the Agency/Contractor*: Sri. MADHUSUDAN A N (SURAKSHA ELECTRICALS).

1. COARSE AGGRGATES TABLE - SIEVE ANALYSIS:

IS Sieve Size, mm	Percentage passing	Requirements as per IS 383-1970 (Reaffirmed on 2007) % Passing	
	40 mm Sample	Single size	Graded
40mm	**100.00**	85-100	90 – 100
20mm	**61.85**	0 -20	30- 70
10mm	**29.15**	0 -5	10- 35
4.75mm	**3.60**	------	0- 5

2. FINE AGGREGATES TABLE - SIEVE ANALYSIS:

IS Sieve Size, mm	Percentage Passing	Specification as Per IS: 383-1970(Reaffirmed 2002) Percentage Passing			Remarks
		Zone-I	Zone-II	Zone -III	
04.75	**95.70**	90-100	90-100	90-100	The Sample Conforms to Grading **Zone-II**
02.36	**83.25**	60-95	75-100	85-100	
01.18	**71.05**	30-70	55-90	75-100	
600.mic	**44.80**	15-34	35-59	60-79	
300.mic	**22.15**	5-20	8-30	12-40	
150.mic	**6.90**	0-10	0-10	0-10	

The result of the materials tested meets the standards and hence can be used for the work.
Doddaballapur Road From New Udupi Veg Hotel To Susilamma Layout

NEWZEN CONSULTANT Sangalore

NEWZEN CONSULTANT BANGALORE, #13,10TH MAIN ROAD 2ND CROSS JNANAJYOTHI NAGARA, JNANABHARATHI, BANGALORE-560056. CELL NO: +91 8792620231, 080 23240187
EMAIL:newzen576@gmail.com

NC/QC/YED/2022-23/W24-C2 **Date: 28-06-2022**

1. TEST REPORT ON CEMENT:

Sub: Testing of 53 Grade Cement Sample (IS 12269-1987).
{Project*: Upgradation of Energy efficient Illumination and ornamental poles in Ward No 02 & 04 Parks in Yelahanka Assembly Constituency.}
Ref.: Material testing/PMC/22-23,
Report Required for: Assistant Executive Engineer,
Yelahanka Electric Division,
BBMP, Bangalore.
Name of the Agency/Contractor*: Sri. MADHUSUDAN A N (SURAKSHA ELECTRICALS).

PHYSICAL TESTS ON CEMENT

Grade * : 53,
Type * : O.P.C

TABLE 1.1:

SL No	Name of Test	Test Results	Requirements as per IS 8112-1989
1	Initial setting time	**158 min**	Shall not be less than 30 min
2	Final setting time	**270min**	Shall not be more than 600 min
3	Fineness (by dry sieving on IS 90 micron sieve)	**2.11%**	Not to exceed 10.0%
4	Soundness test(by Le-Chatelier's method)	**2.18mm**	Shall not be more than 10 mm
5	Compressive strength b) 3 days (average of three results)	**28.55N/Sq mm**	Shall not be less than 27 N/Sqmm

The result of the materials tested meets the standards and hence can be used for the work.
Major Sandeeep Unni Krishnan Road From Veersavankar Flyover To Araka Hospital For Cicle Track LHS

NEWZEN CONSULTANT Bangalore

NEWZEN CONSULTANT BANGALORE, #13,10TH MAIN ROAD 2ND CROSS JNANAJYOTHI NAGARA, JNANABHARATHI, BANGALORE-560056. CELL NO: +91 8792620231, 080 23240187
EMAIL:newzen576@gmail.com

NC/QC/YED/2022-23/W24-CA1 **Date: 27-05-2022**

1. TESTING OF COARSE AGGREGATES (20 mm):

Sub: Testing of Construction Materials.
{Project*: Upgradation of Energy efficient Illumination and ornamental poles in Ward No 02 & 04 Parks in Yelahanka Assembly Constituency.}
Ref.: Material testing/PMC/22-23,
Report Required for: Assistant Executive Engineer,
Yelahanka Electric Division,
BBMP, Bangalore.
Name of the Agency/Contractor*: Sri. MADHUSUDAN A N (SURAKSHA ELECTRICALS).

Table - 1.1 : SIEVE ANALYSIS :

IS Sieve Size, mm	Percentage passing	Requirements as per IS 383-1970 (Reaffirmed on 2002) % Passing	
	20 mm Sample	Single size	Graded
40 mm	**100.00**	100.00	100.00
20 mm	**97.25**	85-100	90 - 100
10 mm	**45.60**	0 - 20	25 - 55
4.75 mm	**3.85**	0 - 5	0 - 10

TABLE 1.2 :

SL No	Test conducted	Results	Requirements as per IS:383-1970 & Tests Conforms to IS 2386(Part I to IV) - 1963 (Reaffirmed on 2002)
1.	Flakiness Index	**26.49%**	Not to exceed 25 %
2.	Crushing value	**28.76%**	Not to exceed 45 % for concrete other than for wearing surfaces and 30% for concrete for wearing surfaces

The result of the materials tested meets the standards and hence can be used for the work.
Major Sandeeep Unni Krishnan Road From Veersavankar Flyover To Araka Hospital For Cicle Track LHS

Page No. 1/1